WHAT IS CLAIMED IS

5

1. An image processing apparatus comprising:

a code stream generating part converting image data into two-dimensional wavelet coefficients, quantizing the same and coding the quantization result

10 so as to compress the image data and generate a code stream;

an additional information creating part creating additional information concerning the image data; and

15 an additional information embedding part embedding the thus-created additional information into the code stream as a code in an off-rule zone which is not decoded by a JPEG 2000 standard rule.

20

2. The image processing apparatus as claimed in claim 1, further comprising:

25 a terminating code providing part forcibly

providing a terminating code at a position before a code length position which is defined by header information, and

wherein:

5   a zone defined from the position at which the terminating code is provided to the code length position is determined as the off-rule zone.

10

3.   The image processing apparatus as claimed in claim 2, wherein:

said terminating code providing part provides

15   the terminating code in a main header area of the code stream.

20

4.   The image processing apparatus as claimed in claim 3, wherein:

said terminating code providing part provides the terminating code before the code length position

25   defined by a PLM marker which describes a main header

packet length.

5

      5.   The image processing apparatus as claimed in claim 3, wherein:

      said terminating code providing part provides the terminating code before the code length position

10   defined by a TLM marker which describes a main header tile length.

15

      6.   The image processing apparatus as claimed in claim 3, wherein:

      said terminating code providing part provides the terminating code before the code length position

20   defined by a PPM marker which collectively describes main header packet headers.

25

7. The image processing apparatus as claimed
in claim 3, wherein:

said terminating code providing part provides
the terminating code before the code length position
5   defined by a COM marker for comments.

10   8. The image processing apparatus as claimed
in claim 2, wherein:

said terminating code providing part provides
the terminating code in an actual code data area of the
code stream.

15

9. The image processing apparatus as claimed
20   in claim 8, wherein:

said terminating code providing part provides
the terminating code before the code length position
defined by an SOT marker which is added at the top of a
tile code sequence for starting a tile.

25

10. The image processing apparatus as clamed in claim 8, wherein:

said terminating code providing part provides the terminating code before the code length position defined by a PLT marker which describes a tile header packet length.

10

11. The image processing apparatus as clamed in claim 8, wherein:

said terminating code providing part provides the terminating code before the code length position defined by a PPT marker which collectively describes tile header packet headers.

20

12. The image processing apparatus as claimed in claim 8, wherein:

said terminating code providing part provides the terminating code before the code length position defined by a COM marker for comments.

13 The image processing apparatus as claimed
in claim 1 wherein:

said additional information embedding part
regards a zone subsequent to an EOC marker which
5 indicates the end of the code steam as the off-rule zone,
and embeds the additional information therein as a code.

10

14. The image processing apparatus as claimed
in claim 1, wherein:

said additional information embedding part
embeds the additional information in a comment space in
15 a COM marker for comments as a code.

20 15. The image processing apparatus as claimed
in claim 1, wherein:

said additional information embedding part
embeds the additional information in an off-rule zone in
an off-rule zone of a marker itself other than a COM
25 marker for comments.

16. The image processing apparatus as claimed in claim 1, wherein:

said additional information creating part creates, as the additional information, tamper resistance information for the image data.

17. The image processing apparatus as claimed in claim 1, wherein:

said additional information creating part creates, as the additional information, management information for the image data

18. The image processing apparatus as claimed in claim 1, wherein:

said additional information creating part creates, as the additional information, image position information concerning image area classification according to image feature such as edge part, character part, picture part, halftone dot part or so.

19. The image processing apparatus as claimed
in claim 1, wherein:

said additional information creating part
creates, as the additional information, from the image
5   data, other image data having an image quality different
from the original image data.

10

20. An image processing apparatus comprising:

an inverse converting part decompressing, into
image data, a code stream generated as a result of
converting image data into two-dimensional wavelet
15 coefficients, quantizing the same and coding the
quantization result; and

an off-rule zone information reading part
reading additional information which is embedded in an
off-rule zone in the code stream as a code, the zone
20 being not decoded according to a JPEG 2000 standard rule.

25   21. The image processing apparatus as claimed

in claim 20, wherein:

the additional information is created by the additional information creating part claimed in claim 1, and embedded by the additional information embedding

5   claimed in claim 1.

10   22.   The image processing apparatus as claimed in claim 20, further comprising:

an additional information processing part which performs processing concerning the image data based on the additional information read by means of

15   said off-rule zone information reading part.

20   23.   The image processing apparatus as claimed in claim 22, wherein:

said additional information processing part forcibly finishes decoding processing upon detecting tamper based on a determination on the additional

25   information read in case the additional information

comprises tamper resistance information.

5

24. The image processing apparatus as claimed in claim 22, wherein:

said additional information processing part generates an alarm upon detecting tamper based on a

10 determination on the additional information read in case the additional information comprises tamper resistance information.

15

25. The image processing apparatus as claimed in claim 22, wherein:

said additional information processing part

20 does not output a part having undergone tamper upon detecting the tamper based on a determination on the additional information read in case the additional information comprises tamper resistance information.

25

26. The image processing apparatus as claimed
in claim 22, wherein:

said additional information processing part
performs file arrangement concerning the relevant image
5   data in case the additional information comprises
management information for the image data.

10

27. The image processing apparatus as claimed
in claim 22, wherein:

said additional information processing part
performs access control for the relevant image data in
15 case the additional information comprises management
information for the image data.

20

28. The image processing apparatus as claimed
in claim 22, wherein:

said additional information processing part
performs image processing such as filtering processing
25 or so depending on a respective one of image portions on

the relevant image data in case the additional

information comprises image position information

concerning image area classification according to image

feature such as edge part, character part, picture part,

5   halftone dot part or so.

10   29.   The image processing apparatus as claimed

in claim 22, wherein:

said additional information processing part

outputs image data having an image quality according to

a payment condition in case the additional information

15   comprises image data having an image quality different

from the original image data.

20

30.   An image reading apparatus comprising:

a photoelectric device reading an image of an

original;

an addition determining part selectively

25   determining additional information concerning the image

data read by means of said photoelectric device and whether or not the additional information is to be embedded; and

the image processing apparatus claimed in
5   claim 1 performing image processing including processing of embedding the additional information to the image data read by means of said photoelectric device in case embedding of the additional data is determined by means of said addition determining part.
10

31.   An image reading apparatus comprising:
15   a photoelectric device reading an image of an original; and

an image processing apparatus claimed in claim 20 performing decompressing, into image data, code data created from converting image data into two-dimensional
20 wavelet coefficients, quantizing the same and coding the quantization result so as to compress the image data.

25

32.   An image forming apparatus comprising:

the image reading apparatus claimed in claim

30; and

a printer engine forming an image onto a paper

5   based on image data decompressed from code data by a

decompressing part after being read by means of said

image reading apparatus, and being processed by the

image processing apparatus of said image reading

apparatus.

10

33.   An image forming apparatus comprising:

15   the image reading apparatus claimed in claim

31; and

a printer engine forming an image onto a paper

based on image data decompressed from code data by a

decompressing part after being read by means of said

20   image reading apparatus, and being processed by the

image processing apparatus of said image reading

apparatus.

25

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34.   The image forming apparatus as claimed in
claim 32, further comprising an interface for externally
transmitting the code data obtained from reading image
data by means of said image reading apparatus and then
5   processed by the image processing apparatus

10   35.   The image forming apparatus as claimed in
claim 33, further comprising an interface for externally
transmitting the code data obtained from reading image
data by means of said image reading apparatus and then
processed by the image processing apparatus

15

36.   A program for causing a computer included
20   in the image processing apparatus claimed in claim 1 to
execute each part of said image processing apparatus.

25

37.   A program for causing a computer included in the image processing apparatus claimed in claim 20 to execute each part of said image processing apparatus.

5

38.   A computer readable recording medium for storing therein the program claimed in claim 36.

10

39.   A computer readable recording medium for storing therein the program claimed in claim 37.

15

20   40.   An image compressing apparatus producing compressed code data of an image, comprising:

a part setting image thumbnail information in one or a plurality of forms; and

a part adding the thus-set forms of thumbnail

25   to a header portion of the compressed code data upon

formation of the code data.

5

41. The image compressing apparatus as
claimed in claim 40, wherein:

image resolution information is applied as the
image thumbnail information.

10

42. The image compressing apparatus as
15 claimed in claim 41, wherein:

image decomposition level information is
applied as the image resolution information.

20

43. The image compressing apparatus as
claimed in claim 40, wherein:

image position information is applied as the
25 image thumbnail information.

44.   The image compressing apparatus as claimed in claim 43, wherein:

one or some of tile information, precinct information, code block information, and pixel position

5   information is applied as the image position information.

10   45.   The image compressing apparatus as claimed in claim 40, wherein:

image component information is applied as the image thumbnail information.

15

46.   The image compressing apparatus as claimed in claim 40, wherein:

20   image quality information is applied as the thumbnail information.

25

47. The image compressing apparatus as claimed in claim 46, wherein;

layer information and/or bit plane information is applied as the image quality information.

5

48. The image compressing apparatus as
10 claimed in claim 40, wherein:

image subband information is applied as the thumbnail information.

15

49. An image processing apparatus extracting an image thumbnail, comprising:

a part extracting a part of compressed code
20 data produced by the image compressing apparatus claimed in claim 40, based on the thumbnail information.

25

50.   An image decompressing apparatus
outputting an image thumbnail, comprising:

a part decompressing only a relevant thumbnail
part of the compressed code data produced by the image

5   compressing apparatus claimed in claim 40, based on the
thumbnail information.

10

51.   An image compressing method for producing
compressed code data of an image, comprising:

a step of setting image thumbnail information
in one or a plurality of forms; and

15   a step of adding the thumbnail information in
the thus-set forms at a head portion of the code data
during forming of the code data.

20

52.   The image compressing method as claimed
in claim 51, wherein:

image resolution information is applied as the

25   image thumbnail information.

53. The image compressing method as claimed in claim 52, wherein:

image decomposition level information is applied as the image resolution information.

5

54. The image compressing method as claimed in claim 51, wherein:

image position information is applied as the image thumbnail information.

15

55. The image compressing method as claimed in claim 54, wherein:

one or some of tile information, precinct information, code block information, and pixel position information is applied as the image position information.

25

56. The image compressing method as claimed in claim 51, wherein:

image component information is applied as the image thumbnail information.

5

57. The image compressing method as claimed in claim 51, wherein:

10

image quality information is applied as the thumbnail information.

15

58. The image compressing method as claimed in claim 57, wherein;

layer information and/or bit plane information is applied as the image quality information.

20

25

59. The image compressing method as claimed

in claim 51, wherein:

image subband information is applied as the thumbnail information.

5

60.   An image processing method for extracting an image thumbnail, comprising:

10   a step of extracting a part of the compressed code data produced in the image compressing method claimed in claim 51, based on the thumbnail information.

15

61.   An image decompressing method for outputting an image thumbnail, comprising:

a step of decompressing only a relevant

20   thumbnail part of the compressed code data produced in the image compressing method claimed in claim 51, based on the thumbnail information.

25

62.　A program for causing a computer to function as the image compressing apparatus claimed in claim 40.

5

63.　A program for causing a computer to function as the image processing apparatus claimed in claim 49.

10

15

64.　A program for causing a computer to function as the image decompressing apparatus claimed in claim 50.

20

65.　A program for causing a computer to execute the image compressing method claimed in claim 51.

25

66.   A program for causing a computer to
execute the image processing method claimed in claim 60.

5

67.   A program for causing a computer to
execute the image decompressing method claimed in claim
61.

10

68.   A computer-readable recording medium for
15   recording therein the program claimed in claim 62.

20   69.   A computer-readable recording medium for
recording therein the program claimed in claim 63.

25

70. A computer-readable recording medium for recording therein the program claimed in claim 64.

5

71. A computer-readable recording medium for recording therein the program claimed in claim 65.

10

72. A computer-readable recording medium for recording therein the program claimed in claim 66.

15

73. A computer-readable recording medium for recording therein the program claimed in claim 67.

20

25   74. An information processing apparatus

producing compressed code data of an image, comprising:

an image inputting part inputting an image to be compressed;

an image compressing part compressing the
5   thus-input image; and

a storage location adding part adding, to the thus-compressed image, information concerning a location storing the image to be compressed.

10

75.   An information processing apparatus producing compressed code data of an image, comprising:
15   an image inputting part inputting an image to be compressed;

an image compressing part compressing the thus-input image;

a first storage location adding part adding,
20   to the thus-compressed image, information concerning a location storing the image to be compressed;

a compressed image outputting part outputting the compressed image;

a second storage location adding part adding,
25   to the image to be compressed, information concerning an

output destination storing the compressed image to which the compressed image is output; and

an image to be compressed outputting part outputting the image to be compressed having the

5   information added thereto by the second storage location adding part, to an inputting source from which said image inputting part initially inputs the image to be compressed.

10

76. An information processing apparatus producing compressed code data of an image, comprising:

15   an image inputting part inputting an image to be compressed;

an image compressing part compressing the thus-input image;

a compressed image outputting part outputting

20   the compressed image;

a storage location adding part adding, to the image to be compressed, information concerning an output destination storing the compressed image to which the compressed image is output; and

25   an image to be compressed outputting part

outputting the image to be compressed having the
information added thereto by said storage location
adding part, to an inputting source from which said
image inputting part initially inputs the image to be
5   compressed.

10   77.   An information processing apparatus
producing compressed code data of an image, comprising:
        an image inputting part inputting an image to
be compressed;
        an image compressing part compressing the
15   thus-input image into a plurality of compressed images;
and
        a storage location adding part adding, to the
thus-obtained plurality of compressed images,
information concerning a location storing the image to
20   be compressed.

25   78.   An information processing apparatus

producing compressed code data of an image, comprising:

an image inputting part inputting an image to be compressed;

an image compressing part compressing the
thus-input image into a plurality of compressed images;

a first storage location adding part adding, to the thus-obtained plurality of compressed images, information concerning a location storing the image to be compressed;

a compressed image outputting part outputting the compressed images;

a second storage location adding part adding, to the image to be compressed, information concerning output destinations storing the respective ones of the plurality of compressed images to which the compressed images are output; and

an image to be compressed outputting part outputting the image to be compressed having the information added thereto by the second storage location adding part, to an inputting source from which said image inputting part initially inputs the image to be compressed.

79. An information processing apparatus producing compressed code data of an image, comprising:

an image inputting part inputting an image to be compressed;

5   an image compressing part compressing the thus-input image into a plurality of compressed images;

a compressed image outputting part outputting the thus-obtained plurality of compressed images;

a storage location adding part adding, to the

10   image to be compressed, information concerning output destinations storing the respective ones of the plurality of compressed images to which the compressed images are thus output; and

an image to be compressed outputting part

15   outputting the image to be compressed having the information added thereto by said storage location adding part, to an inputting source from which said image inputting part initially inputs the image to be compressed.

20

80. The information processing apparatus as

25   claimed in claim 77, comprising:

a compressed image outputting part outputting the respective compressed images; and

a part adding, to a head portion of each of the plurality of compressed images compressed by said

5   image compressing part, during forming the code data, information concerning a location storing another compressed image of the plurality of compressed images.

10

81.   The information processing apparatus as claimed in claim 78, comprising:

a compressed image outputting part outputting

15   the respective compressed images; and

a part adding, to a head portion of each of the plurality of compressed images compressed by said image compressing part, during forming the code data, information concerning a location storing another

20   compressed image of the plurality of compressed images.

25   82.   The information processing apparatus as

claimed in claim 79, comprising:

a compressed image outputting part outputting the respective compressed images; and

a part adding, to a head portion of each of the plurality of compressed images compressed by said image compressing part, during forming the code data, information concerning a location storing another compressed image of the plurality of compressed images.

83. The information processing apparatus as claimed in claim 77, comprising:

a compressed image outputting part outputting the respective compressed images;

an image to be compressed outputting part outputting the image to be compressed to an inputting source of said image inputting part; and

a part adding, to a head portion of the image to be compressed, during forming the code data thereof, information concerning output destinations to which the respective one of the plurality of compressed images are output.

84. The information processing apparatus as claimed in claim 78, comprising:

a compressed image outputting part outputting the respective compressed images;

5   an image to be compressed outputting part outputting the image to be compressed to an inputting source of said image inputting part; and

a part adding, to a head portion of the image to be compressed, during forming the code data thereof,

10   information concerning output destinations to which the respective one of the plurality of compressed images are output.

15

85. The information processing apparatus as claimed in claim 79, comprising:

a compressed image outputting part outputting

20   the respective compressed images;

an image to be compressed outputting part outputting the image to be compressed to an inputting source of said image inputting part; and

a part adding, to a head portion of the image

25   to be compressed, during forming the code data thereof,

information concerning output destinations to which the respective one of the plurality of compressed images are output.

5

86.	The information processing apparatus as claimed in claim 74, wherein:

10	the inputting source or the output destination comprises an internet-reachable storage location, and the information concerning the storage location comprises an IP address and/or an URL.

15

87.	The information processing apparatus as claimed in claim 75, wherein:

20	the inputting source or the output destination comprises an internet-reachable storage location, and the information concerning the storage location comprises an IP address and/or an URL.

25

88.   The information processing apparatus as
claimed in claim 76, wherein:

the inputting source or the output destination
comprises an internet-reachable storage location, and

5   the information concerning the storage location
comprises an IP address and/or an URL.

10

89.   The information processing apparatus as
claimed in claim 77, wherein:

the inputting source or the output destination
comprises an internet-reachable storage location, and

15   the information concerning the storage location
comprises an IP address and/or an URL.

20

90.   The information processing apparatus as
claimed in claim 78, wherein:

the inputting source or the output destination
comprises an internet-reachable storage location, and

25   the information concerning the storage location

comprises an IP address and/or an URL.

5

91.   The information processing apparatus as claimed in claim 79, wherein:

the inputting source or the output destination comprises an internet-reachable storage location, and

10   the information concerning the storage location comprises an IP address and/or an URL.

15

92.   The information processing apparatus as claimed in claim 74, wherein:

the compressed code data is produced based on a method defined by JPEG 2000.

20

93.   The information processing apparatus as

25   claimed in claim 75, wherein:

the compressed code data is produced based on
a method defined by JPEG 2000.

5

94. The information processing apparatus as
claimed in claim 76, wherein:

the compressed code data is produced based on
10   a method defined by JPEG 2000.

15   95. The information processing apparatus as
claimed in claim 77, wherein:

the compressed code data is produced based on
a method defined by JPEG 2000.

20

96. The information processing apparatus as
claimed in claim 78, wherein:

25   the compressed code data is produced based on

a method defined by JPEG 2000.

5

97. The information processing apparatus as claimed in claim 79, wherein:

the compressed code data is produced based on a method defined by JPEG 2000.

10

98. An information processing method for producing compressed code data of an image, comprising:

an image inputting step of inputting an image to be compressed;

an image compressing step of compressing the thus-input image; and

a storage location adding step of adding, to the thus-compressed image, information concerning a location storing the image to be compressed.

25

99. An information processing method for producing compressed code data of an image, comprising:

an image inputting step of inputting an image to be compressed;

5   an image compressing step of compressing the thus-input image;

a first storage location adding step of adding, to the thus-compressed image, information concerning a location storing the image to be compressed;

10   a compressed image outputting step of outputting the compressed image;

a second storage location adding step of adding, to the image to be compressed, information concerning an output destination storing the compressed

15   image to which the compressed image is output; and

an image to be compressed outputting step of outputting the image to be compressed having the information added thereto in the second storage location adding step, to an inputting source from which the image

20   to be compressed is initially input in said image inputting step.

25

100. An information processing method for producing compressed code data of an image, comprising:

an image inputting step of inputting an image to be compressed;

5
an image compressing step of compressing the thus-input image;

a compressed image outputting step of outputting the compressed image;

a storage location adding step of adding, to

10 the image to be compressed, information concerning an output destination storing the compressed image to which the compressed image is thus output; and

a image to be compressed outputting step of outputting the image to be compressed having the

15 information added thereto in said storage location adding step, to an inputting source from which the image to be compressed is initially input in said image inputting step.

20

101. An information processing method for producing compressed code data of an image, comprising:

25
an image inputting step of inputting an image

to be compressed;

an image compressing step of compressing the thus-input image into a plurality of compressed images; and

5   a storage location adding step of adding, to the thus-obtained plurality of compressed images, information concerning a location storing the image to be compressed.

10

102.   An information processing method for producing compressed code data of an image, comprising:

15   an image inputting step of inputting an image to be compressed;

an image compressing step of compressing the thus-input image into a plurality of compressed images;

a first storage location adding step of adding,

20   to the thus-obtained plurality of compressed images, information concerning a location storing the image to be compressed;

a compressed image outputting step of outputting the compressed images;

25   a second storage location adding step of

adding, to the image to be compressed, information concerning output destinations storing the respective ones of the plurality of compressed images to which the compressed images are output; and

5   an image to be compressed outputting step of outputting the image to be compressed having the information added thereto in the second storage location adding step, to an inputting source from which the image to be compressed is initially input in said image

10 inputting step.

15   103. An information processing method for producing compressed code data of an image, comprising:

         an image inputting step of inputting an image to be compressed;

         an image compressing step of compressing the

20 thus-input image into a plurality of compressed images;

         a compressed image outputting step of outputting the thus-obtained plurality of compressed images;

         a storage location adding step of adding, to

25 the image to be compressed, information concerning

output destinations storing the respective ones of the plurality of compressed images to which the compressed images are output; and

an image to be compressed outputting step of

5   outputting the image to be compressed having the information added thereto in said storage location adding step, to an inputting source from which the image to be compressed is initially input in said image inputting part.

10

104.   The information processing method as

15   claimed in claim 101, comprising:

a compressed image outputting step of outputting the respective compressed images; and

a step of adding, to a head portion of each of the plurality of compressed images compressed in said

20   image compressing step, during forming the code data, information concerning a location storing another compressed image of the plurality of compressed images.

25

105. The information processing method as claimed in claim 102, comprising:

a compressed image outputting step of outputting the respective compressed images; and

5   a step of adding, to a head portion of each of the plurality of compressed images compressed in said image compressing step, during forming the code data, information concerning a location storing another compressed image of the plurality of compressed images.

10

106. The information processing method as 15 claimed in claim 103, comprising:

a compressed image outputting step of outputting the respective compressed images; and

a step of adding, to a head portion of each of the plurality of compressed images compressed in said 20 image compressing step, during forming the code data, information concerning a location storing another compressed image of the plurality of compressed images.

25

107. The information processing method as claimed in claim 101, comprising:

a compressed image outputting step of outputting the respective compressed images;

5   an image to be compressed outputting step of outputting the image to be compressed to an inputting source in said image inputting step; and

a step of adding, to a head portion of the image to be compressed, during forming the code data

10   thereof, information concerning output destinations to which the respective one of the plurality of compressed images are output.

15

108. The information processing method as claimed in claim 102, comprising:

a compressed image outputting step of

20   outputting the respective compressed images;

an image to be compressed outputting step of outputting the image to be compressed to an inputting source in said image inputting step; and

a step of adding, to a head portion of the

25   image to be compressed, during forming the code data

thereof, information concerning output destinations to which the respective one of the plurality of compressed images are output.

5

109. The information processing method as claimed in claim 103, comprising:

10   a compressed image outputting step of outputting the respective compressed images;

          an image to be compressed outputting step of outputting the image to be compressed to an inputting source in said image inputting step; and

15   a step of adding, to a head portion of the image to be compressed, during forming the code data thereof, information concerning output destinations to which the respective one of the plurality of compressed images are output.

20

110. The information processing method as

25 claimed in claim 98, wherein:

the inputting source or the outputting
destination comprises an internet-reachable storage
location, and the information concerning the storage
location comprises an IP address and/or an URL.

5

111.   The information processing method as
10   claimed in claim 99, wherein:
        the inputting source or the outputting
destination comprises an internet-reachable storage
location, and the information concerning the storage
location comprises an IP address and/or an URL.

15

112.   The information processing method as
20   claimed in claim 100, wherein:
        the inputting source or the outputting
destination comprises an internet-reachable storage
location, and the information concerning the storage
location comprises an IP address and/or an URL.

25

113. The information processing method as claimed in claim 101, wherein:

the inputting source or the outputting destination comprises an internet-reachable storage location, and the information concerning the storage location comprises an IP address and/or an URL.

114. The information processing method as claimed in claim 102, wherein:

the inputting source or the outputting destination comprises an internet-reachable storage location, and the information concerning the storage location comprises an IP address and/or an URL.

115. The information processing method as claimed in claim 103, wherein:

the inputting source or the outputting destination comprises an internet-reachable storage location, and the information concerning the storage

location comprises an IP address and/or an URL.

5

116.   The information processing method as claimed in claim 98, wherein:

the compressed code data is produced based on a method defined by JPEG 2000.

10

117.   The information processing method as claimed in claim 99, wherein:

15

the compressed code data is produced based on a method defined by JPEG 2000.

20

118.   The information processing method as claimed in claim 100, wherein:

the compressed code data is produced based on

25   a method defined by JPEG 2000.

119. The information processing method as claimed in claim 101, wherein:

the compressed code data is produced based on a method defined by JPEG 2000.

5

120. The information processing method as claimed in claim 102, wherein:

10 the compressed code data is produced based on a method defined by JPEG 2000.

15

121. The information processing method as claimed in claim 103, wherein:

the compressed code data is produced based on 20 a method defined by JPEG 2000.

25 122. A program for causing a computer to

function as the information processing apparatus claimed
in claim 74.

5

          123.   A program for causing a computer to
function as the information processing apparatus claimed
in claim 75.

10

          124.   A program for causing a computer to
15   function as the information processing apparatus claimed
in claim 76.

20

          125.   A program for causing a computer to
function as the information processing apparatus claimed
in claim 77.

25

126. A program for causing a computer to function as the information processing apparatus claimed in claim 78.

5

127. A program for causing a computer to function as the information processing apparatus claimed

10 in claim 79.

15 128. A program for causing a computer to execute the information processing method claimed in claim 98.

20

129. A program for causing a computer to execute the information processing method claimed in claim 99.

25

130. A program for causing a computer to execute the information processing method claimed in claim 100.

5

131. A program for causing a computer to execute the information processing method claimed in
10 claim 101.

15 132. A program for causing a computer to execute the information processing method claimed in claim 102.

20

133. A program for causing a computer to execute the information processing method claimed in claim 103.

25

134.   A compute-readable recording medium for recording therein the program claimed in claim 122.

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135.   A compute-readable recording medium for recording therein the program claimed in claim 123.

10

136.   A compute-readable recording medium for recording therein the program claimed in claim 124.

15

137.   A compute-readable recording medium for

20   recording therein the program claimed in claim 125.

25   138.   A compute-readable recording medium for

recording therein the program claimed in claim 126.

5

139. A compute-readable recording medium for recording therein the program claimed in claim 127.

10

140. A compute-readable recording medium for recording therein the program claimed in claim 128.

15

141. A compute-readable recording medium for recording therein the program claimed in claim 129.

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142. A compute-readable recording medium for recording therein the program claimed in claim 130.

143. A compute-readable recording medium for recording therein the program claimed in claim 131.

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144. A compute-readable recording medium for recording therein the program claimed in claim 132.

10

145. A compute-readable recording medium for recording therein the program claimed in claim 133.

15

146. An information processing apparatus

20 comprising:

an extracting part extracting desired code data from image code data; and

an extracted code data with concern information generating part adding information

25 concerning the extraction to the thus-extracted code

data so as to generate an extracted code data with the

concern information.

5

147. An information processing apparatus

comprising:

an extracting part extracting desired code

10   data from image code data; and

an image code data with concern information

generating part adding information concerning the

extraction to the original image code data so as to

generate an image code data with the concern information.

15

148. An information processing apparatus

20   comprising:

an extracting part extracting desired code

data from image code data; and

a relation information holding and managing

part holding and managing information indicating a

25   relation between information concerning the extraction

and the thus-extracted code data.

5

149. The information processing apparatus as claimed in claim 146, further comprising:

a transfer request receiving part receiving a transfer request externally, and

10 wherein:

said extracting part extracts the desired code data from the original code data in response to a reception of a transfer request in said transfer request receiving part.

15

150. The information processing apparatus as 20 claimed in claim 147, further comprising:

a transfer request receiving part receiving a transfer request externally, and

wherein:

said extracting part extracts the desired code 25 data from the original code data in response to a

reception of the transfer request in said transfer

request receiving part.

5

151. The information processing apparatus as
claimed in claim 148, further comprising:

a transfer request receiving part receiving a

10 transfer request externally, and

wherein:

said extracting part extracts the desired code

data from the original code data in response to a

reception of the transfer request in said transfer

15 request receiving part.

20 152. The information processing apparatus as
claimed in claim 149, wherein:

said extracted code data with concern

information generating part adds, in addition to the

information concerning the extraction, information

25 concerning the relevant transfer request to the

extracted code data so as to generate the extracted code data with the concern information.

5

153.   The information processing apparatus as claimed in claim 150, wherein:

said image code data with concern information generating part adds, in addition to the information concerning the extraction, information concerning the relevant transfer request to the image code data so as to generate the image code data with the concern information.

15

154.   The information processing apparatus as claimed in claim 151, wherein:

said relation information holding and managing part holds and manages information indicating relation between information concerning the relevant transfer request as well as the information concerning the extraction and the extracted information.

155. The information processing apparatus as claimed in claim 146, further comprising:

a transfer part transferring the extracted code data with the concern information, and

wherein:

said transfer part comprises a setting part for setting a transfer destination.

156. The information processing apparatus as claimed in claim 147, further comprising:

a transfer part transferring the extracted code data with the concern information, and

wherein:

said transfer part comprises a setting part for setting a transfer destination.

157. The information processing apparatus as claimed in claim 148, further comprising:

a transfer part transferring the extracted

code data with concern information, and

wherein:

said transfer part comprises a setting part

for setting a transfer destination.

5

158. The information processing apparatus as

10 claimed in claim 155, wherein:

said extracted code data with concern

information generating part adds, in addition to the

information concerning the extraction, information

concerning the relevant transfer destination to the

15 extracted code data so as to generate the extracted code

data with the concern information.

20

159. The information processing apparatus as

claimed in claim 156, wherein:

said image code data with concern information

generating part adds, in addition to the information

25 concerning the extraction, information concerning the

relevant transfer destination to the image code data so as to generate the image code data with the concern information.

5

160.   The information processing apparatus as claimed in claim 157, wherein:

10   said relation information holding and managing part holds and manages information concerning the relevant transfer destination as well as the information concerning the extraction and the extracted information.

15

161.   The information processing apparatus as claimed in claim 146, wherein:

20   the information concerning the extraction to be added to the extracted code data by said extracted code data with concern information generating part comprises information concerning the contents of the code data extracted from the original image code data.

25

162. The information processing apparatus as
claimed in claim 147, wherein:

the information concerning the extraction to
be added to the original image code data by said image
5   code data with concern information generating part
comprises information concerning the contents of the
code data extracted from the original image code data.

10

163. The information processing apparatus as
claimed in claim 148, wherein:

the information concerning the extraction to
15   be held and managed by said relation information holding
and managing part comprises information concerning the
contents of the code data extracted from the original
image code data.

20

164. The information processing apparatus as
claimed in claim 146, wherein:

25   the information concerning the extraction to

be added to the extracted code data by said extracted

code data with concern information generating part

comprises information concerning the original image code

data.

5

165.   The information processing apparatus as

10   claimed in claim 147, wherein:

the information concerning the extraction to

be added to the original image code data by said image

code data with concern information generating part

comprises information concerning the original image code

15   data.

20   166.   The information processing apparatus as

claimed in claim 148, wherein:

the information concerning the extraction to

be held and managed by said relation information holding

and managing part comprises information concerning the

25   original image code data.

167. The information processing apparatus as claimed in claim 146, wherein:

the information concerning the extraction to be added to the extracted code data by said extracted code data with concern information generating part comprises information concerning the device which possesses the original image code data.

168. The information processing apparatus as claimed in claim 147, wherein:

the information concerning the extraction to be added to the original image code data by said image code data with concern information generating part comprises information concerning the device which possesses the original image code data.

169. The information processing apparatus as claimed in claim 148, wherein:

the information concerning the extraction to

be held and managed by said relation information holding and managing part comprises information concerning the device which possesses the original image code data.

5

170. The information processing apparatus as claimed in claim 146, wherein:

10   the information concerning the extraction to be added to the extracted code data by said extracted code data with concern information generating part comprises information concerning the device which possesses the extracted code data.

15

171. The information processing apparatus as claimed in claim 147, wherein:

20 claimed in claim 147, wherein:
        the information concerning the extraction to be added to the original image code data by said image code data with concern information generating part comprises information concerning the device which
25 possesses the extracted code data.

172. The information processing apparatus as claimed in claim 148, wherein:

the information concerning the extraction to be held and managed by said relation information holding and managing part comprises information concerning the device which possesses the extracted code data.

173. An information processing method comprising:

an extracting step of extracting desired code data from image code data; and

an extracted code data with concern information generating step of adding information concerning the extraction to the thus-extracted code data so as to generate an extracted code data with the concern information.

174. An information processing method comprising:

an extracting step of extracting desired code data from image code data; and

an image code data with concern information generating part adding information concerning the

5 extraction to the original image code data so as to generate an image code data with the concern information.

10

·175.   An information processing apparatus comprising:

an extracting step of extracting desired code data from image code data; and

15 a relation information holding and managing step of holding and managing information indicating a relation between information concerning the extraction and the thus-extracted code data.

20

176.   The information processing method as claimed in claim 173, further comprising:

25 a transfer request receiving step of receiving

a transfer request externally, and

wherein:

said extracting step comprises a step of
extracting the desired code data from the original code
5   data in response to a reception of a transfer request in
said transfer request receiving step.

10

177.   The information processing method as
claimed in claim 174, further comprising:

a transfer request receiving step of receiving
a transfer request externally, and
15   wherein:

said extracting step comprises a step of
extracting the desired code data from the original code
data in response to a reception of a transfer request in
said transfer request receiving step.

20

178.   The information processing method as
25   claimed in claim 175, further comprising:

a transfer request receiving step of receiving

a transfer request externally, and

wherein:

said extracting step comprising a step of

5 extracting the desired code data from the original code

data in response to a reception of a transfer request in

said transfer request receiving step.

10

179. The information processing method as

claimed in claim 176, wherein:

said extracted code data with concern

15 information generating step comprising a step of adding,

in addition to the information concerning the extraction,

information concerning the relevant transfer request to

the extracted code data so as to generate the extracted

code data with the concern information.

20

180. The information processing method as

25 claimed in claim 177, wherein:

said image code data with concern information
generating step comprises a step of adding, in addition
to the information concerning the extraction,
information concerning the relevant transfer request to
5   the image code data so as to generate the image code
data with the concern information.

10

181. The information processing method as
claimed in claim 178, wherein:
said relation information holding and managing
step comprises a step of holding and managing
15   information concerning the relevant transfer request as
well as the information concerning the extraction and
the extracted information.

20

182. The information processing method as
claimed in claim 173, further comprising:
a transfer step of transferring the extracted
25   code data with concern information, and

wherein:

said transfer step comprises a setting step of setting a transfer destination.

5

183.   The information processing method as claimed in claim 174, further comprising:

10   a transfer step of transferring the extracted code data with concern information, and

wherein:

said transfer step comprises a setting step of setting a transfer destination.

15

184.   The information processing method as

20 claimed in claim 175, further comprising:

a transfer step of transferring the extracted code data with concern information, and

wherein:

said transfer step comprises a setting step of

25 for setting a transfer destination.

185. The information processing method as claimed in claim 182, wherein:

said extracted code data with concern information generating step comprising a step of adding, 5 in addition to the information concerning the extraction, information concerning the relevant transfer destination to the extracted code data so as to generate the extracted code data with the concern information.

10

186. The information processing method as claimed in claim 183, wherein:

15 said image code data with concern information generating step comprises a step of adding, in addition to the information concerning the extraction, information concerning the relevant transfer destination to the image code data so as to generate the image code 20 data with the concern information.

25 187. The information processing method as

claimed in claim 184, wherein:

said relation information holding and managing

step comprising a step of holding and managing

information concerning the relevant transfer destination

5   as well as the information concerning the extraction and

the extracted information.

10

188.   The information processing method as

claimed in claim 173, wherein:

the information concerning the extraction to

be added to the extracted code data in said extracted

15   code data with concern information generating step

comprises information concerning the contents of the

code data extracted from the original image code data.

20

189.   The information processing method as

claimed in claim 174 wherein:

the information concerning the extraction to

25   be added to the original image code data in said image

code data with concern information generating step comprises information concerning the contents of the code data extracted from the original image code data.

5

190.   The information processing method as claimed in claim 175, wherein:

10   the information concerning the extraction to be held and managed in said relation information holding and managing step comprises information concerning the contents of the code data extracted from the original image code data.

15

191.   The information processing method as

20   claimed in claim 173, wherein:

the information concerning the extraction to be added to the extracted code data in said the extracted code data with concern information generating step comprises information concerning the original image

25   code data.

192. The information processing method as claimed in claim 174, wherein:

the information concerning the extraction to be added to the original image code data in said image
5   code data with concern information generating step comprises information concerning the original image code data.

10

193. The information processing method as claimed in claim 175, wherein:

the information concerning the extraction to
15 be held and managed in said relation information holding and managing step comprises information concerning the original image code data.

20

194. The information processing method as claimed in claim 173, wherein:

the information concerning the extraction to
25 be added to the extracted code data in said extracted

code data with concern information generating step comprises information concerning the device which possesses the original image code data.

5

195.   The information processing method as claimed in claim 174, wherein:

10   the information concerning the extraction to be added to the original image code data in said the image code data with concern information generating step comprises information concerning the device which possesses the original image code data.

15

196.   The information processing method as

20   claimed in claim 175, wherein:

the information concerning the extraction to be held and managed in said relation information holding and managing step comprises information concerning the device which possesses the original image code data.

25

197. The information processing method as claimed in claim 173, wherein:

the information concerning the extraction to be added to the extracted code data in said extracted

5   code data with concern information generating step comprises information concerning the device which possesses the extracted code data.

10

198. The information processing method as claimed in claim 174, wherein:

the information concerning the extraction to

15 be added to the original image code data in said original code data with concern information generating step comprises information concerning the device which possesses the extracted code data.

20

199. The information processing method as claimed in claim 175, wherein:

25 the information concerning the extraction to

be held and managed in said relation information holding and managing step comprises information concerning the device which possesses the extracted code data.

5

200. A program for causing a computer to execute the information processing method claimed in claim 173.

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201. A program for causing a computer to execute the information processing method claimed in claim 174.

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202. A program for causing a computer to execute the information processing method claimed in claim 175.

25

203. A computer-readable recording medium for recording therein the program claimed in claim 200.

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204. A computer-readable recording medium for recording therein the program claimed in claim 201.

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205. A computer-readable recording medium for recording therein the program claimed in claim 202.